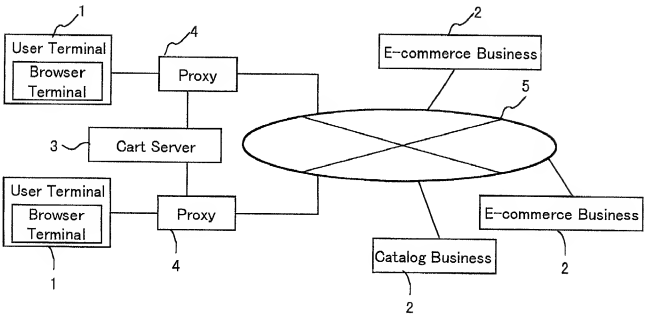
1
User Terminal
Browser Terminal
4
Proxy
2
E-commerce Business
5
3
Cart Server
User Terminal
Browser Terminal
Proxy
E-commerce Business
Catalog Business
1
4
2
2

Fig. 1

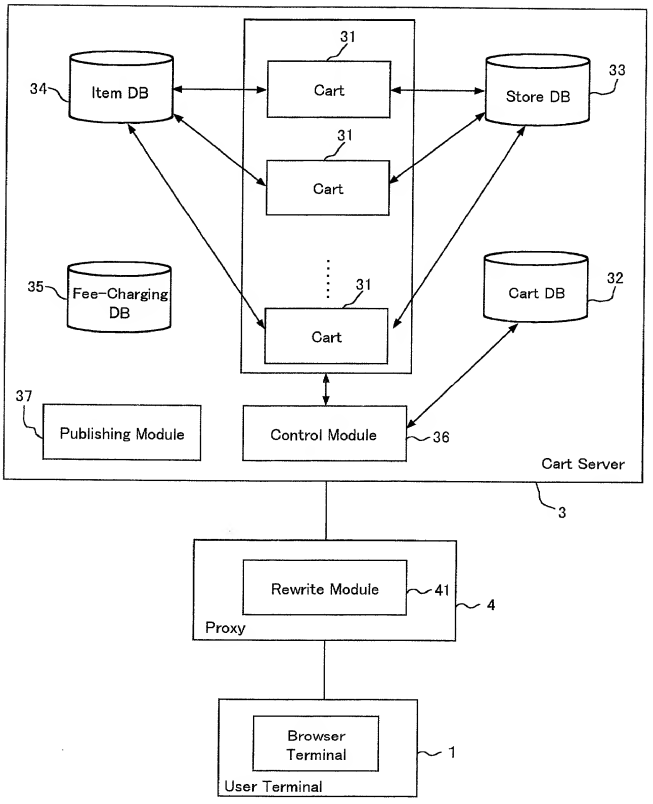
31
34
Item DB
Cart
Store DB
33
31
Cart
35
Fee-Charging DB
31
Cart DB
32
Cart
37
Publishing Module
Control Module
36
Cart Server
3
Rewrite Module
41
4
Proxy
Browser Terminal
1
User Terminal

Fig. 2

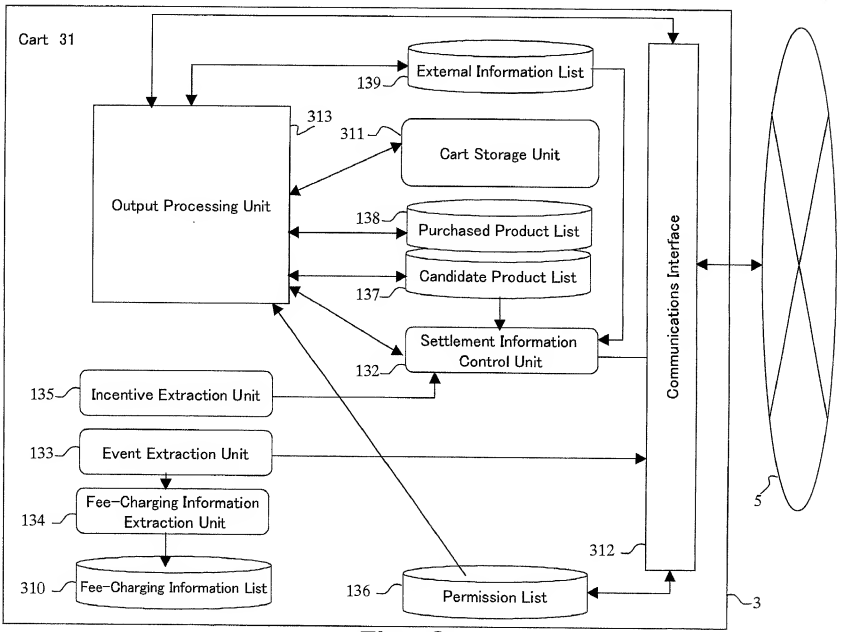
Cart 31
External Information List
139
313
311
Cart Storage Unit
Output Processing Unit
138
Purchased Product List
Candidate Product List
137
Settlement Information Control Unit
132
Communications Interface
135
Incentive Extraction Unit
133
Event Extraction Unit
Fee-Charging Information Extraction Unit
134
310
Fee-Charging Information List
136
Permission List
312
5
3

Fig. 3

Cart ID	User ID
5432	Taro@fujitsu.co.jp
5433	Jiro@fujitsu .co.jp
5434	Taro@fujitsu.co.jp

Fig. 4A

```
<store_list>
        <store sid=0123>
        <name>Akachanya</name>
        <icon  href="http://..."/>
          <address href="http://akachan-ya.com"/>
        </store>
        <store sid=0564>
        <name>Ningyo-no Satsukido</name>
        <icon  href="http://..."/>
          <address href="http://satsukido.com"/>
        </store>
        <store sid=0777>
        <name>Gift Honpo</name>
        <icon  href="http://..."/>
          <address href="http://honpo.com"/>
        </store>
        <store sid=989>
        <name>Sanjusando</name>
        <icon  href="http://..."/>
          <address href="http://33do.com"/>
        </store>
        <store sid=0019>
        <name>Kuma Honpo Co.</name>
        <icon  href="http://..."/>
          <address href="http://kuma.com"/>
        </store>
</store_list>
```

Fig. 4B

```
<item_list>
        <item id=1211>
        <name>Baby car type A</name>
        <icon  href="http://...”/>
        </item>
        <item id=5235>
        <name>Dolls (2)</name>
        <icon  href="http://...”/>
        </item>
        <item id=3333>
        <name>Giant bear</name>
        <icon  href="http://...”/>
        </item>
</item_list>
```

Fig. 5A

Store ID	Cart ID	Fee Amount	Date	Account
0123	5432	¥1200	2000/6/2	AbankXX 1
	5434	¥600	2000/6/3	BbankXX 2
0124	5561	¥5200	2000/5/30	CbankZZ
	5700	¥240	2000/6/1	AbankYY
	5810	¥2400	2000/6/1	BbankZZ
⋮				

Fig. 5B

● Settlement Information List

```
<paymentinfo>
        <credit id=1>
        <number>5250-XXXX-XXXX-XXXX</number>
        <holder>Taro Fuji</holder>
        <valid_through>“03/02”</valid_through>
        <description>MASTER</description>
        </credit>
        <credit id=2>
        <number>3584-XXXX-XXXX-XXXX</number>
        <holder>Taro Fuji</holder>
        <valid_through>“01/01”</valid_through>
        <description>JCB</description>
        </credit>
</paymentinfo>
```

Fig. 6

●Permission List

```
<permission_list>
        <permission>
        <store sid=0123>Akachanya</store>
        <address href="http://akacyan-ya.com/cart/taro/5432"/ >
        </permission>
        <permission>
        <store sid=0564>Ningyo-no Satsukido</store>
        <address href="http://satsukido.com/cart/taro/5432"/>
        </permission>
        <permission>
        <store sid=0777>Gift Honpo</store>
          <address href="http://honpo.com/cart/taro/5432"/>
        </permission>
</permission_list>
```

Fig. 7

●Example of Candidate Product List
{{id=3333, 12,000 yen, sid=<No Designation>}}

```
<wish_list>
        <item id=3333>
        <price>12000</price>
        <store> </store>
        Giant bear
        </item>
</wish_list>
```

Fig. 8A

●Example of Candidate Product List
{{id=3333, 10,000 yen, sid=<0019 >}}

```
<wish_list>
        <item id=3333>
        <price >10000</price>
        <store sid=0019>Kuma Honpo Co. </store>
        Giant bear
        </item>
</wish_list>
```

Fig. 8B

●A Conceptual Figure of the Purchased Product List

```
<wish_list>
        <item id=1211>
        <price>23000</price>
         <store sid=0564>Ningyo-no Satsukido</store>
        Baby car type A
        </item>
        <item id=3333>
        <price >10000</price>
        <store sid=0019 > Kuma Honto Co.</store>
        Giant bear
        </item>
</wish_list>
```

●Candidate Product List Example

```
<settled_list>
        <item id=5235>
        <price>18000</price>
         <store sid=0989> Sanjusando</store>
        Dolls (2)
        </item>
</settled_list>
```

Fig. 9

SUBSTITUTE SHEET (RULE 26)

●External Information List Example

```
<ad_list>
        <ad aid=222123>
        <store sid=0564>Ningyo-no Satsukido</store>
        <item id=5235>Dolls (2)</item>
         <ad_body>
                <html><head></head>
                <body>
                20% off sale now going on at Ningyo-no Satsukido
                </body></html>
        </ad_body>
        </ad>
</ad_list>
```

Fig. 10

●Fee-Charging List Example
{X Travel Company, 1,200 yen, <fee payer information>,
Y Travel, 300 yen, <fee payer information>}

Fig. 11A

●Fee-Charging List Example
{Akachanya, 1,200 yen, <*fee payer information* (ex. banker account etc.)>,
Satsukido, 5,300 yen, <*fee payer information* (ex. banker account etc.)>,
Doll house, 240 yen, <*fee payer information* (ex. banker account etc.)>}

Fig. 11B

```
<cart id=5432>
        <name>Congratulations on birth of grandchild</name>
        <category>Gifts</category>
        <wish_list>
                <item id=1211>
                <price>23000</price>
                 <store sid=0564>Ningyo-no Satsukido</store>
                Baby car type A
                </item>
                <item id=3333>
                <price >10000</price>
                <store sid=0019 > Kuma Honpo Co.</store>
                Giant bear
                </item>
        </wish_list>
        <settled_list>
                <item id=5235>
                <price>18000</price>
                 <store sid=0989>Sanjusando </store>
                Dolls (2)
                </item>
        </settled_list>
        <ad_list>
                <ad aid=222123>
                <store sid=0564>Ningyo-no Satsukido</store>
                <item id=5235>Dolls (2)</item>
                 <ad_body>
                <html><head></head>
                <body>
                20% off sale now going on at Ningyo-no Satsukido
                </body></html>
                </ad_body>
                </ad>
                <ad aid=222158>
                <store sid=0019>Kuma Honpo Co. </store>
                <item id=3333>Giant bear</item>
                <ad_body>
                <html><head></head>
                <body>
                Purchaser X: Very cute; my three-year-old daughter always sleeps with it
                </body></html>
                </ad_body>
                </ad>
                <ad aid=222157>
                <store sid=0989>Sanjusando </store>
                <item id=5235 >Dolls (2)</item>
                <ad_body>
                <html><head></head>
                <body>
                <img src=... />Manufacturer's warranty
                </body></html>
                </ad_body>
                </ad>
        </ad_list>
        <permission_list>
                <permission>
                <store sid=0123>Akachanya</store>
                <address href="http://..."/ >
                </permission>
                <permission>
                <store sid=0564>Ningyo-no Satsukido</store>
                <address href="http://..."/>
                </permission>
                <permission>
                <store sid=0777>Gift Honpo</store>
                <address href="http://..."/>
                </permission>
        </permission_list>
        <address href="http://cart.com/cart/5432"/ >
</cart>
```

Fig. 12

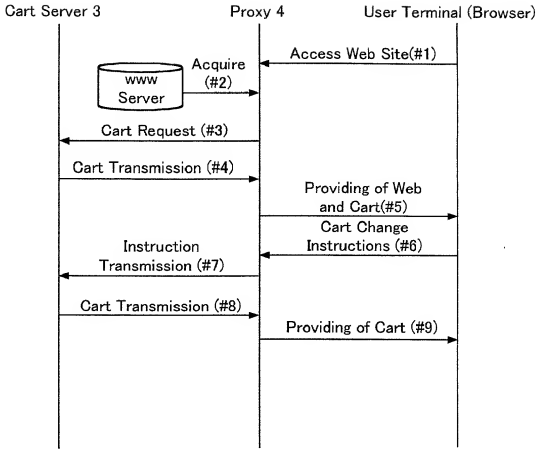

Fig. 13A

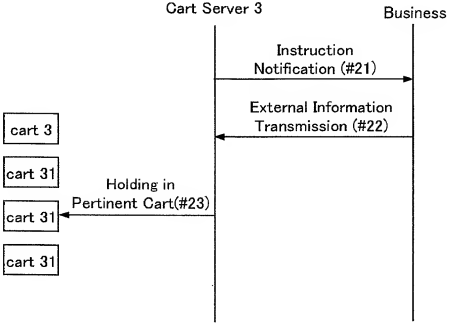

Fig. 13B

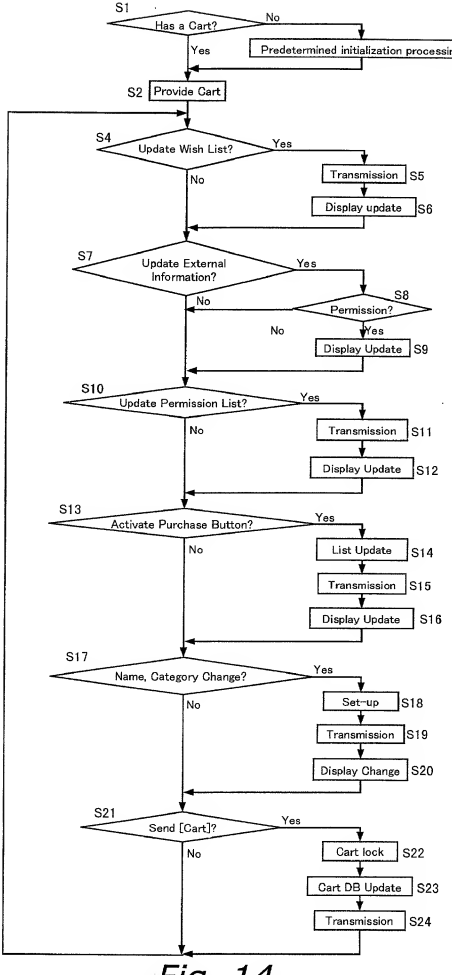
S1
Has a Cart?
No
Predetermined initialization processing
S3
Yes
S2
Provide Cart
S4
Update Wish List?
Yes
Transmission
S5
No
Display update
S6
S7
Update External Information?
Yes
S8
Permission?
No
No
Yes
Display Update
S9
S10
Update Permission List?
Yes
No
Transmission
S11
Display Update
S12
S13
Activate Purchase Button?
Yes
No
List Update
S14
Transmission
S15
Display Update
S16
S17
Name, Category Change?
Yes
No
Set-up
S18
Transmission
S19
Display Change
S20
S21
Send [Cart]?
Yes
No
Cart lock
S22
Cart DB Update
S23
Transmission
S24

Fig. 14

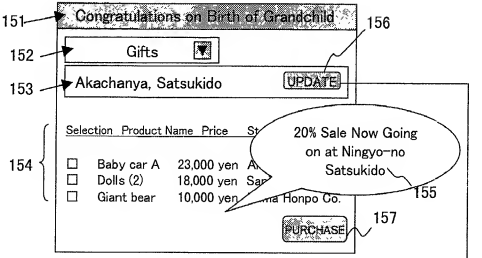

Fig. 15A

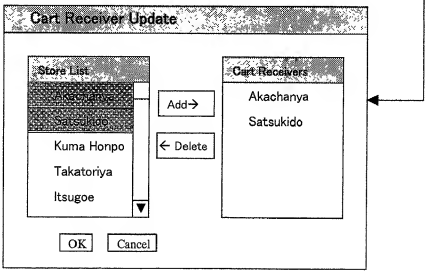

Fig. 15C

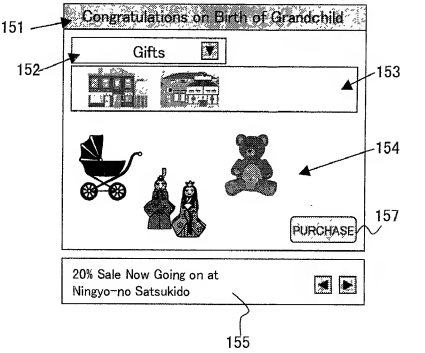

Fig. 15B

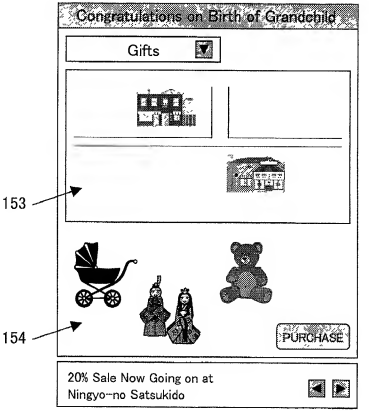

Fig. 16A

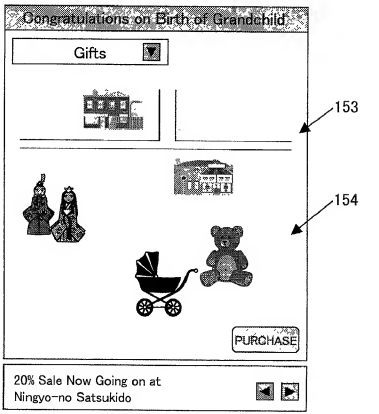

Fig. 16B

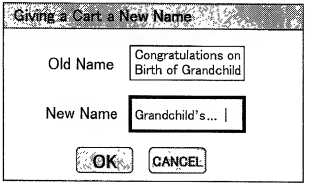

Fig. 17A

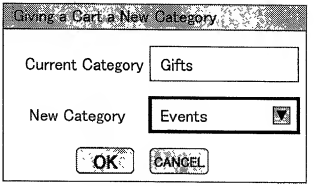

Fig. 17B

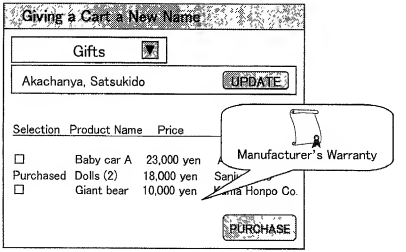

Fig. 18A

Fig. 18B

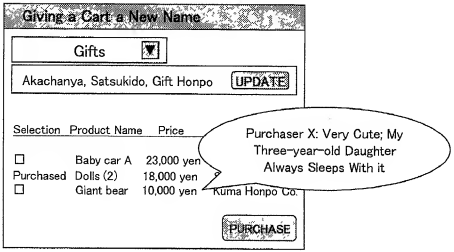

Fig. 19A

Fig. 19B

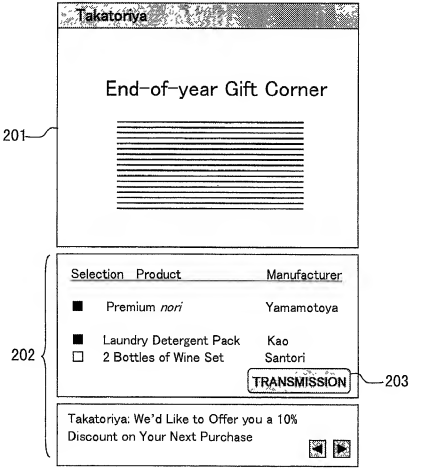

Fig. 20A

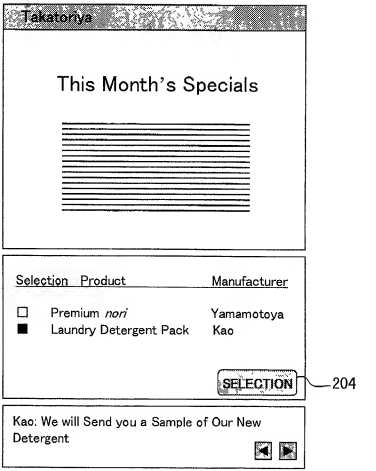

Fig. 20B

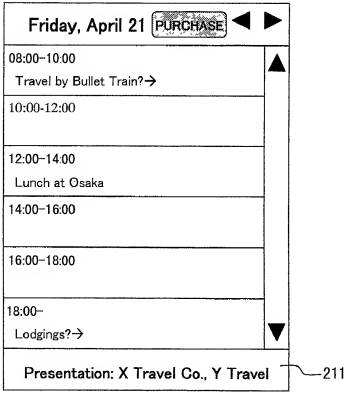

Fig. 21A

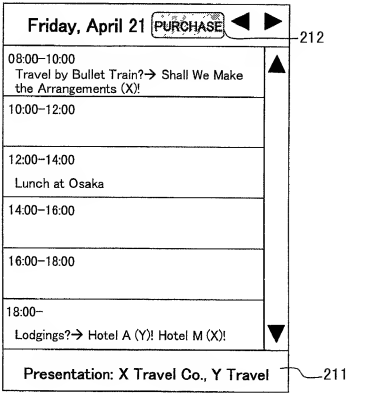

Fig. 21B

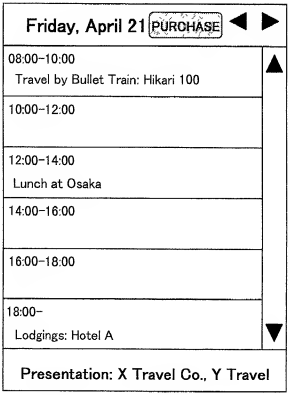
Friday, April 21
PURCHASE
08:00–10:00
Travel by Bullet Train: Hikari 100
10:00–12:00
12:00–14:00
Lunch at Osaka
14:00–16:00
16:00–18:00
18:00–
Lodgings: Hotel A
Presentation: X Travel Co., Y Travel

Fig. 22

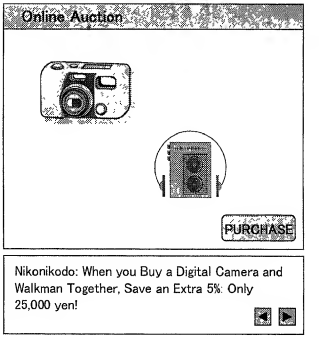
Online Auction
PURCHASE
Nikonikodo: When you Buy a Digital Camera and Walkman Together, Save an Extra 5%. Only 25,000 yen!

Fig. 23

Product	Total Units Sold	Lowest Price	Highest Price	Most Common Price	Store Ranking
Digital Camera α	467	11,100 Yen	15,700 Yen	13,900 Yen	X Denki, Y Shoten,...
Video deck K	3	32,000 Yen	33,000 Yen	32,000 Yen	Discount King Z,....

Fig. 24

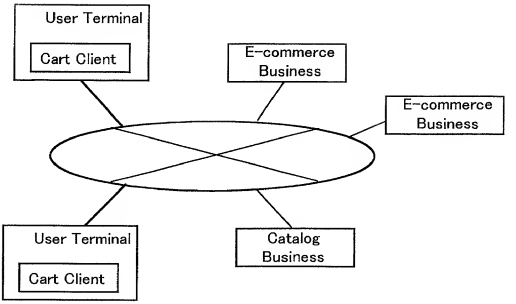
User Terminal
Cart Client
E-commerce Business
E-commerce Business
User Terminal
Cart Client
Catalog Business

Fig. 25

Hina Ningyou House
Order Your Dolls
at Our House
Gifts
PURCHASE
Dolls: Manufacturer's
Warranty

Fig. 26